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PATENT
Docket No. 285.00810102IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Caswell et al.) Group Art Unit: 2666
Serial No.: 09/400,607) Examiner: D. Ton
Conf. No.: 3600)
Filed: 20 September 1999)
For: COMPUTER-BASED MULTIFUNCTION PERSONAL COMMUNICATION
SYSTEM WITH CALLER ID

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commission for Patents
P.O. Box 1450
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Dear Sir:

This Appeal Brief is presented in support of the appeal from the final rejection of claims 7-19 of the above-identified application as set forth in the Final Office Action mailed 17 November 2003 and as indicated in the Notice of Appeal filed 16 March 2004.

This Appeal Brief is being submitted in triplicate, as set forth in 37 C.F.R. §1.192(a). Please charge the amount of \$330 to cover the fee for filing this Appeal Brief. In addition, a two month Petition for Extension of Time to file this Appeal Brief is being submitted herewith. Please charge the appropriate fees for such extension, and any additional fees or credit any overpayment to Deposit Account No. 13-4895.

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Real Party in Interest

The real party in interest is Multi-Tech Systems, Inc. of Mounds View, Minnesota, as evidenced by the assignment at Reel 7303/Frame 0832.

Related Appeals and Interferences

There are no known related appeals or interferences pending in connection with the present application.

Status of Claims

Claims 7-19 are pending, with claims 1-6 having been cancelled upon filing of the patent application. Therefore, the final rejection of claims 7-19 is appealed.

Status of Amendments

No amendments or remarks were filed subsequent to the receipt of the Final Office Action dated 17 November 2003. All pending claims 7-19, including all entered amendments, are presented in attached Appendix A.

Summary of the Invention

The present invention provides for rapid identification of a caller and limited access to personal communications systems based on a variety of parameters obtained from caller identification information. For example, incoming telephone call information may be compared to a preprogrammed access matrix to determine if the caller is authorized to access the personal communications system.

Exemplary embodiments of system interfaces according to the present invention are described in claims 16 and 19, diagrammatically illustrated in at least portions of FIGS. 16-17B, and generally described at page 67, line 29 through page 80, line 2. Further, the present invention provides a method for controlling access to a telephone personal communications system as set forth in claim 7. Exemplary embodiments of such a method are described in claim 7, diagrammatically illustrated in FIGS. 16-21, and generally described at page 67, line 29, through page 80, line 2.

In general, the personal communications system 1600 of the present invention is the interface between a standard telephone line service 1610 and a computer system 1620 using

telephone lines 1630. *See* FIG. 16. Caller ID interface 1650 provides caller ID functionality to personal communications system 1600.

The personal communications system interface that is connected to a telephone line, as described, e.g., in claim 16, includes a telephone input port for receiving telephone signals into the interface. The caller ID interface 1650 includes a ring detector 1710, an off-hook circuit 1720, a caller identification information decoder 1750, a controller 1770, and memory device 1780. *See*, e.g., FIG. 17A. The ring detector 1710, which is connected to the telephone input port, is used to detect incoming calls. The caller ID decoder 1750 is connected to the telephone input port through the off-hook circuit 1720. The off-hook circuit 1720 is used to hang up on an unwanted caller before actually answering the telephone.

In one embodiment of the present invention, the caller ID interface 1650 acquires information about incoming calls by decoding the incoming caller ID information. The controller 1770 compares the caller ID information to an access matrix for identification purposes. The controller 1770 handles calls based on the caller identification information decoded by the caller ID information decoder 1750 and information in the access matrix. If the controller 1770 operates to detect an unauthorized caller, then the controller 1770 places the telephone input port off-hook and then hangs up on the unauthorized caller before the unauthorized caller is able to access the personal communications system interface.

In an alternate embodiment as generally described, e.g., in claim 19, the personal communications system interface 1650 may also include a multiplexer 1740. The multiplexer 1740 may connect the caller ID decoder 1750 to the telephone input port and dc holding circuit 1730 used to maintain a connection with the incoming telephone call. The multiplexer 1740 may select telephone signals from the telephone input port for caller identification information decoding at caller ID decoder 1750 and from the dc holding circuit 1730 for personal communications system data decoding.

The present invention further includes a method for controlling access to a telephone personal communications system as is generally illustrated in claim 7. Various access parameters (2002) are provided as shown, for example, in FIG. 20. A variety of preprogrammed

criteria may be utilized to control access to the personal communications system. For example, in one embodiment, screening by name and telephone number is performed on an inclusive (or exclusive) basis by preprogramming the caller ID interface with the names or telephone numbers of the callers with (or without) access privileges. Access parameters may also include days and times of day.

The method further includes detecting a phone call (2004). Caller identification information is received without answering the phone call. The caller identification information is decoded (2006) and compared with access parameters to determine whether access is authorized (2008). If access is unauthorized, the telephone personal communications system is placed off-hook (2020) and the system hangs up (2022) so as to prevent access to the telephone personal communications system. If access is authorized, then a connection to the telephone personal communications system is enabled (2014).

Issue

- I. Whether claims 7-19 of the above-identified patent application are properly rejected under 35 U.S.C. §103(a) as being unpatentable over Long (U.S. Patent No. 5,377,260) in view of the background of the invention of Chow or Chow (U.S. Patent No. 5,644,629).

Grouping of Claims

For the purposes of this appeal, claims 7-19 stand or fall together under Issue I.

Arguments

Claims 7-19 are patentable under 35 U.S.C. § 103(a) over Long (U.S. Patent No. 5,377,260) (hereinafter "Long") in view of the background of the invention of Chow or Chow (U.S. Patent No. 5,644,629) (hereinafter "Chow").

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations (see M.P.E.P. §2143).

The Examiner asserts that Long teaches all the subject matter of the claimed invention with the exception of "placing the telephone personal communications system off hook and then hanging up so as to prevent access to the telephone personal communications system." However, the Examiner alleges that Chow teaches using "quick hangup" and that the "motivation for using the quick hang-up as taught by the background of invention of Chow or Chow in the communications network of Long being that it provides efficiency in call handling as well as improved call routing since it prevents the unauthorized callers get access to the telephone communication system."

However, contrary to the Examiner's assertions, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary

skill in the art, to modify Long with any of the teachings of Chow to provide the present invention as recited in claims 7-19.

For example, Long teaches something entirely different than a hanging up function. As stated in Long, if a call is to be ignored, a display device receives an appropriate indication alerting the customer to ignore the phone. *See* Long, column 7, lines 13-30. From the disclosure provided in Long, the ringing continues until the calling party terminates the call. No "hanging up" operation is taught by Long. Further, Long teaches that the disclosed device can be programmed to either not turn on the ring function of the phone being called or not place such phone in an off-hook state when an unauthorized caller ID is detected. According to Long, "[i]f the called customer does not pick up the receiver, the ringing signal continues until the calling party hangs up their telephone which terminates the call." Long, column 6, lines 13-16 (emphasis added). In other words, the party receiving the incoming call does not hang up on the caller. Instead, the calling party terminates their own phone call by hanging up. This teaching of Long is completely opposite of the present invention, where the telephone personal communications system being called hangs up on the caller if the caller's access to the system is unauthorized.

In Chow (column 2, lines 4-13), hang up is accomplished by routing a call to an external answering machine which answers the call, after which, an off-hook signal is detected, waits for a second or so, and then breaks the connection to the incoming telephone lines.

While Chow describes a provision for hang up, one would not be motivated to modify Long with the teachings of Chow because making such a modification would change the principle of operation of Long. Applicant maintains that if the proposed modification or combination of the prior art changes the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *See* M.P.E.P. §2143.01. This is clearly the case when attempting to modify Long with Chow. Whether Long describes an answering machine or not (as discussed in the Examiner's comments on similar arguments previously presented by Appellant), the principle operation of Long would be changed if modified by Chow.

As indicated herein, Long teaches that the party receiving the incoming call does not hang up on the caller. Instead, the calling party terminates their own phone call by hanging up. This teaching of Long is completely contrary to the use of a hang up function, such as set forth in Chow. As such, one would not modify Long with such a hang up function as described in Chow when making such a modification would completely change the principle of operation of Long.

For at least the reasons presented herein, Appellant submits that the *primaefacie* obviousness rejection of claims 7, 16, and 19 is unsupported. Moreover, dependent claims 8-15 and 17-18, which depend from either independent claim 7 or claim 16, are also nonobvious not only due to their dependence, but also because of the particular subject matter addressed in each of these claims.

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Conclusion

For the reasons provided herein, Appellants respectfully submit that pending claims 7-19 are allowable in view of the cited references. Review and reversal of the final rejections are respectfully requested.

CERTIFICATE UNDER 37 C.F.R. 1.10:

The undersigned hereby certifies that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated below and is addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
"Express Mail" Mail: EV405459284 US

Date of Deposit:

July 12, 2004

Name:

Sandy Truehart
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12 July 2004
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Appeal Brief
APPENDIX A - Pending Claims
Serial No.: 09/400,607
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**COMPUTER-BASED MULTIFUNCTION
PERSONAL COMMUNICATION SYSTEM WITH CALLER ID**

7. A method for controlling access to a telephone personal communications system, comprising:

preprogramming a memory device with access parameters;

detecting a phone call;

receiving caller identification information without answering the phone call;

decoding caller identification information;

comparing caller identification information with access parameters to determine whether access is authorized;

if access is unauthorized, placing the telephone personal communications system off hook and then hanging up so as to prevent access to the telephone personal communications system; and

if access is authorized, enabling a connection to the telephone personal communications system.

8. The method of claim 7, wherein preprogramming further comprises programming a list of names of authorized caller names.

9. The method of claim 7, wherein preprogramming further comprises programming a list of authorized caller telephone numbers.

10. The method of claim 7, wherein preprogramming further comprises programming a list of authorized times of day to call.

11. The method of claim 7, wherein preprogramming further comprises programming a list of authorized days to call.

12. The method of claim 7, wherein preprogramming further comprises programming a list of authorized caller names, days and times of day to call.

13. The method of claim 7, wherein preprogramming further comprises programming a list of authorized caller telephone numbers, days and times of day to call.

14. The method of claim 7, wherein preprogramming further comprises programming a list of unauthorized caller names.

15. The method of claim 7, wherein preprogramming further comprises programming a list of unauthorized caller numbers.

16. A personal communications system interface connected to a telephone line, the personal communications system interface comprising:

a telephone input port for receiving telephone signals into the personal communications system interface;

a ring detector, connected to the telephone input port, for detecting incoming calls;

an off-hook circuit connected to the telephone input port, for placing the telephone input port in an off-hook condition;

a caller identification information decoder, connected to the telephone input port through the off-hook circuit, for decoding caller identification information;

a controller, connected to the ring detector, off-hook circuit, and caller identification information decoder, for comparing the caller identification information to an access matrix for identification purposes; and

a memory device, connected to the controller, for storing the access matrix, wherein the controller handles calls based on the caller identification information decoded by the caller identification information decoder and information in the access matrix, wherein if the controller operates to detect an unauthorized caller, then the controller places the telephone input port off-hook and then hangs up on the unauthorized caller before the unauthorized caller is able to access the personal communications system interface.

17. The system interface of claim 16 wherein the controller is a processor.

18. The system interface of claim 16 wherein the controller is combinational logic.

19. A personal communications system interface, connected to a telephone line, for screening incoming telephone calls to personal communications system electronics, the personal communications system interface comprising:

a telephone input port for receiving telephone signals into the personal communications system interface;

a ring detector, connected to the telephone input port, for detecting an incoming call;

an off-hook circuit, connected to the telephone input port, for connecting the personal communications system interface to the telephone line;

a dc holding circuit, connected to the off-hook circuit and the input port, for maintaining a connection with incoming telephone calls;

a decoder for decoding caller identification information and personal communications system data;

a multiplexer, connecting the decoder to the telephone input port and the dc holding circuit, for selecting telephone signals from the telephone input port for caller identification information decoding and from the dc holding circuit for personal communications system data decoding;

a controller, connected to the ring detector, off-hook circuit, dc holding circuit, multiplexer, and decoder, for controlling the internal personal communications system interface and for comparing caller identification to an access matrix for authorization purposes, wherein if the controller detects an unauthorized caller, then the controller places the telephone input port

off-hook and then hangs up; and

a memory device, connected to the controller, for storing the access matrix.